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10/672,771	09/26/2003	Shaobo Wang	2003P04918US01	9712
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			EXAMINER WONG, BLANCHE	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 02/01/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/672,771

Applicant(s)

WANG ET AL.

Examiner

Blanche Wong

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the last Office Action has been withdrawn.

Response to Arguments

2. Applicant's arguments filed January 14, 2008 have been fully considered but they are not persuasive.
3. With regard to 112, 1st rejections of claim 1, Applicant fails to address the difference where the usage of "SVCs" in the claim language and "dynamic VCs" in the Specification.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

4. With regard to 112, 1st rejection of claims 10 and 16 and 17, Applicant fails to address the difference between Service AdvertisingCfm message and Server Advertise message.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

5. With regard to 112, 1st rejection of claim 18, Applicant states that the support for "updating a route table" is on page 10, lines 5-7 of Specification. Response to Office

Action, dated January 14, 2008, page 10, para. 6. However, Examiner respectfully disagrees. Specification discloses "the proxy [signaling] server 140 updates the subscriber's route table to route traffic over the newly created dynamic VC" whereas the claim language recites "updating a route table ... via the proxy signaling server in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVCs." Clearly, the Specification and the claim language are slightly different in at least two places: 1) the Specification discloses the proxy signaling server updating the route table whereas it is not necessary that the proxy signaling server updates the route table in the claim language. That is, although "via" means "by way of" according to the Applicant (Response to Office Action, dated January 14, 2008, page 11, para. 6), the word "via" does not actively indicate who is "updating a route table"; and 2) the Specification discloses one newly created dynamic VC whereas the claim language uses one or more SVCs.

6. With regard to 112, 2nd rejection of claim 1, Examiner understands that "via" means "by way of" according to the Applicant (Response to Office Action, dated January 14, 2008, page 11, para. 6). However, "via a subscriber" does not mean that a subscriber is sending a request for extra bandwidth in order to transmit information ("one skilled in the art would recognize that the request of the extra bandwidth was in order to transit information", Response to Office Action, dated January 14, 2008, page 12, para. 4).

7. With regard to 103 rejection of claims 1-7, Applicant states that "LaCost's addition of a single route is to support the dedicated connection" and that "a prima facie

case of obviousness ... must be some suggest or motivation ... to modify the reference of to combine reference teachings. ..." It is precisely because LaCost teaches a dedicated connection for BoD session, Examiner introduces the teachings of ATM PVC and SVCs for BoD session in Sreedharan in order to make LaCost a more versatile system. The improvement of Sreedharan over LaCost serves as motivation to modify/combine Sreedharan and LaCost.

Drawings

8. The drawings are objected to because Fig. 3 lacks descriptive labeling.
9. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the method of claim 1 including "default connection [of ATM PVC] between a subscriber data processing system and a content-provider data processing system" and "a bandwidth-on-demand session [of SVCs] between said subscriber data processing system and said content-provider data processing system" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

10. The disclosure is objected to because of the following informalities: Throughout the Specification, all "proxy server 140" should be replaced with "proxy signaling server 140" in consistent with other claim language.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. **Claims 1-7,10-17,18,20-22** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to claim 1, claim limitation recites "said bandwidth-on-demand session creates one or more switched virtual circuits (SVCs) between said subscriber data processing system and said content-provider data processing system". However, Specification does not disclose SVCs. Specification on p.6, para. 3, discloses "[i]f a subscriber wants to initiate a BoD session, the subscriber directs the client-side application 107 to initiate the session. In response, the client-side application 107 sends a request to the connection-management application 142 ... The connection-management application 142 then communicates on behalf of the subscriber ... to create one or more dynamic VCs to supplement the subscriber's default connection." Specification discloses dynamic VCs but not SVCs. That is, *SVCs are dynamic VCs because SVCs is established only when data must be transferred across a network, but dynamic VCs are not necessary SVCs* (with emphasis).

With regard to claim 10, claim limitation discloses "to request a bandwidth-on-demand session after said receive, and for transmitting information to said proxy signaling server in response to said request". However, Specification does not disclose "after said receive" and "in response to said request". Specification on p.8, para. 1, discloses "[a]fter the subscriber receives the list of available services, the subscriber data processing system 105 sends a Service AdvertisingCfm message to the proxy server 140 to acknowledge receipt of the Service Advertise message." *Specification discloses after the receipt of the Service Advertise message, not the receipt of service advertising information* due to said login (with emphasis). Specification further discloses in response to receipt of the list of available services.

With regard to claim 10, amended claim limitation discloses "providing service advertising information to said client-side application due to said login". However, Specification does not disclose "providing service advertising information to said client-side application due to said login". Specification on p.8, para. 1, discloses "[a]fter the subscriber receives the list of available services, the subscriber data processing system 105 sends a Service AdvertisingCfm message to the proxy server 140 to acknowledge receipt of the Service Advertise message." Specification discloses "providing service advertising information to *said subscriber* due to said login" (with emphasis).

With regard to claim 16, claim limitation discloses "initiate a bandwidth-on-demand session after said receive". However, Specification does not disclose "after said receive". Specification on p.8, para. 1, discloses "[a]fter the subscriber receives the list of available services, the subscriber data processing system 105 sends a

Service AdvertisingCfm message to the proxy server 140 to acknowledge receipt of the Service Advertise message.” *Specification discloses after the receipt of the Service Advertise message, not the receipt of service advertising information due to said login (with emphasis).*

With regard to claim 17, new claim limitation discloses “wherein initiating said bandwidth-on-demand session is in response to said providing of said service advertising information”. However, Specification does not disclose in response to said providing of said service advertising information. Specification on p.8, para. 1, discloses “[a]fter the subscriber receives the list of available services, the subscriber data processing system 105 sends a Service AdvertisingCfm message to the proxy server 140 to acknowledge receipt of the Service Advertise message.” Specification discloses an initiating step *in response to login/advertising completion* (with emphasis). An initiating step might follow an login and advertising steps, but only in response to the completion of these steps.

13. With regard to claim 18, new claim limitation discloses “updating a route table ... via the proxy signaling server in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVCs”. However, Specification discloses a variation of “updating a route table”. Specification discloses “the proxy [signaling] server 140 updates the subscriber’s route table to route traffic over the newly created dynamic VC” whereas the claim language recites “updating a route table ... via the proxy signaling server in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVCs.”

Clearly, the Specification and the claim language are slightly different in at least two places: 1) the Specification discloses the proxy signaling server updating the route table whereas it is not necessary that the proxy signaling server updates the route table in the claim language. That is, although "via" means "by way of" according to the Applicant (Response to Office Action, dated January 14, 2008, page 11, para. 6), the word "via" does not actively indicate who is "updating a route table"; and 2) the Specification discloses one newly created dynamic VC whereas the claim language uses one or more SVCs.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. **Claims 1-7,17,18** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, it is unclear what is meant by "via said subscriber" or whether Applicant means initiating a bandwidth-on-demand session by a subscriber. Specification on p.6, para. 3, discloses "[i]f a subscriber wants to initiate a BoD session, the subscriber directs the client-side application 107 to initiate the session". Specification discloses a subscriber actively initiating a bandwidth-on-demand session whereas "initiating a bandwidth-on-demand session [by way of] a subscriber" does not necessarily mean that a subscriber is actively taking part. A subscriber can be a widget used to initiate a BoD session.

With regard to claim 1, it is unclear who is "establishing a default connection between a subscriber data processing system and a content-provider data processing system" and "ending said bandwidth-on-demand session" when a subscriber is the one who is "initiating a bandwidth-on-demand session".

Claim Rejections - 35 USC § 103

16. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

17. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over LaCost et al. (U.S. Pat No. 6,453,317) in view of Sreedharan et al. (Pub No. US 2002/0057700).

With regard to claim 1, LaCost discloses a method of providing bandwidth on demand comprising:

establishing a default connection (**a dedicated connection, col. 6, line 5**) between a subscriber data processing system (**customer facilities**) and a content-provider data processing system (**servers**) (**establish a communications link between customer facilities and servers, col. 5, line 67-col. 6, line 1**); and

initiating a bandwidth-on-demand session (**to add a single route**) by a subscriber (**customer**), said bandwidth-on-demand session creates one or more switched virtual circuits (SVCs) between said subscriber data processing system and said content-provider data processing system to supplement (**e.g. to support hyperstream frame relay connection**) the bandwidth of said default connection (**A**

customer would have to add a single route ... to support hyperstream frame relay facilities, col. 6, lines 11-13).

However, LaCost fails to explicitly show a default connection comprising an asynchronous transfer mode (ATM) permanent virtual circuit (PVC); a bandwidth-on-demand session that creates one or more switched virtual circuits (SVCs); and ending said bandwidth-on-demand session by terminating said one or more SVCs.

Sreedharan discloses a default connection **(a dedicated line)** comprising an asynchronous transfer mode (ATM) permanent virtual circuit (PVC) **(PVC) (A PVC connection is a virtual circuit that provides the equivalent of a dedicated line ... between two endpoints, para. [0029]) (See A/so “if a frame relay user attempts to exchange data ... a tunneling PVC ... through ATM switch”, para. [0034]);** a bandwidth-on-demand session that creates one or more switched virtual circuits (SVCs) **(SVC) (“In contrast to a PVC connection, a switched virtual circuit (SVC) connection is a virtual circuit that is established only when data must be transferred across a network”, para. [0030]);** and ending **(broken down)** said bandwidth-on-demand session by terminating said one or more SVCs **(SVC connection) (“An SVC connection lasts only as long as the data transferred and is broken down as soon as the transfer is complete”, para. [0030]).**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine a default connection comprising an asynchronous transfer mode (ATM) permanent virtual circuit (PVC); a bandwidth-on-demand session that creates one or more switched virtual circuits (SVCs); and ending said bandwidth-on-demand session by terminating said one or more SVCs, as taught in Sreedharan, with LaCost to provide for ATM PVC and SVCs for BoD session.

18. **Claims 2-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over LaCost and Sreedharan as applied to claim 1 above, and further in view of Cunetto et al. (Pub No. US 2002/0024954).

With regard to claim 2, the combination of LaCost and Sreedharan discloses the method of claim 1.

However, the combination fails to explicitly show a step of initiating a bandwidth-on-demand session comprises sending a message from said subscriber data processing system to a proxy signaling server comprising information related to said bandwidth-on-demand session and in response to said message, sending a message from said proxy signaling server to an ATM edge device to create one or more SVCs between said subscriber data processing system and said content-provider data processing system.

Cunetto discloses an initiating step comprises sending a message (**setup request**) from said subscriber data processing system (**calling party**) to a proxy signaling server (**service controller**) (**an SVC call establishment ... a calling party (SVC service customer) ... sending a ... setup request to the service controller via the edge switch ..., para. [0078]**) (**See Also step 51 in Fig. 3**) comprising information (**the subscribers' service features and limits, and access rights and limits, para. [0078]**) related to said bandwidth-on-demand session and in response to said message, sending a message (**proxy setup request**) from said proxy signaling server (**service controller**) to an ATM edge device (**ATM edge switch**) (**the SVC service controller 13 then sends a ... proxy setup request to the ATM edge switch, para. [0079]**) (**See Also step 53 in Fig. 3**) to create one or more SVCs (**SVC is established, para. [0083]**).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine a initiating step comprises sending a message from said subscriber data processing system to a proxy signaling server comprising information related to said bandwidth-on-demand session and in response to said message, sending a message from said proxy signaling server to an ATM edge device to create one or more SVCs, as taught in Cunetto, with LaCost and Sreedharan, to provide for call control for ATM SVC signaling.

With regard to claim 3, the combination of LaCost, Sreedharan and Cunetto discloses the method of claim 2.

Cunetto further discloses data for authenticating said subscriber (**access right**) (**the subscribers' service features and limits, and access rights and limits, para. [0078]**).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine data for authenticating said subscriber, as taught in Cunetto, with LaCost and Sreedharan, to provide for call control for ATM SVC signaling.

With regard to claim 4, the combination of LaCost, Sreedharan and Cunetto discloses the method of claim 2.

Cunetto further discloses UNI signals (**UNI**) (**UNI setup request, para. [0078]** and **UNI proxy setup request, para. [0079]**).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine UNI signals, as taught in Cunetto, with LaCost and Sreedharan, to employ defined service signaling mechanism for ATM SVC services and to support standard end systems that use ATM UNI signaling. Cunetto, para. [0068].

With regard to claim 5, the combination of LaCost, Sreedharan and Cunetto discloses the method of claim 2.

The combination does not explicitly show an ending step comprises sending a message from said subscriber data processing system to a proxy signaling server comprising an instruction to end said bandwidth-on-demand session and, in response to

said message, sending a message from said proxy signaling server to an ATM edge device to terminate said one or more SVCs.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to reverse the initiating step in claim 2 to provide for the ending step in claim 5. The suggestion/motivation for doing so would have been to complete call control for ATM SVC signaling. Therefore, it would have been obvious to combine an ending step comprises sending a message from said subscriber data processing system to a proxy signaling server comprising an instruction to end said bandwidth-on-demand session and, in response to said message, sending a message from said proxy signaling server to an ATM edge device to terminate said one or more SVCs with LaCost, Sreedharan and Cunetto, for the benefit of call control for ATM SVC signaling, to obtain the invention as specified in claim 5.

With regard to claim 6, the combination of LaCost, Sreedharan and Cunetto discloses the method of claim 2.

Cunetto further discloses said ATM edge device comprises an ATM switch (**edge switch in para. [0078] and ATM edge switch in para. [0079]) (See Also edge switch in Fig. 2 and 3).**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine an ATM edge switch, as taught in Cunetto, with LaCost and Sreedharan, to provide for call control for ATM SVC signaling.

With regard to claim 7, the combination of LaCost, Sreedharan and Cunetto discloses the method of claim 6.

Cunetto further discloses a client-side application **(the subscriber's application, para. [0101])**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine a client-side application, as taught in Cunetto, with LaCost and Sreedharan, to provide for call control for ATM SVC signaling.

Allowable Subject Matter

19. Claims 10 and 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

20. Claims 11-15,20-22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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RW

BW
January 29, 2008

EDAN . ORGAD
SUPERVISORY PATENT EXAMINER

Ed Orgad